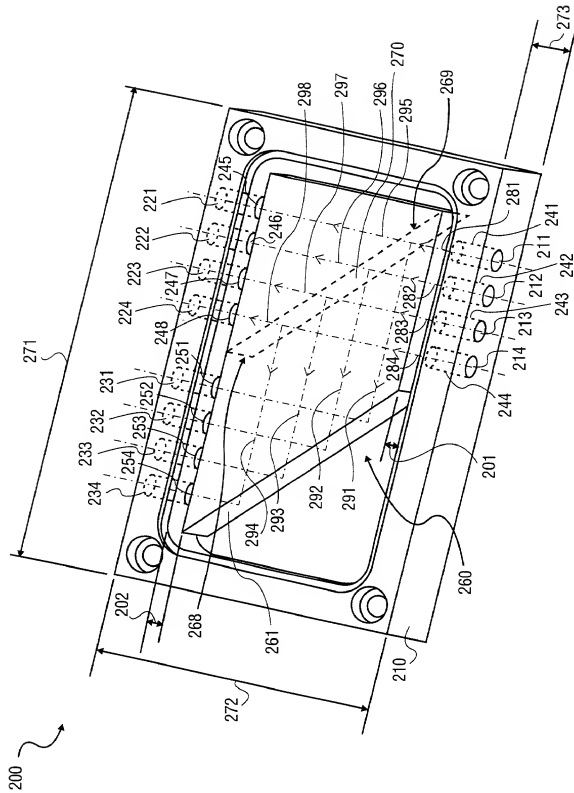


FIG. 1
(PRIOR ART)



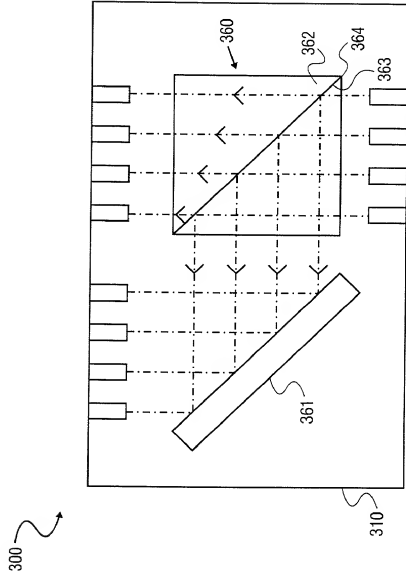


FIG. 3

400 

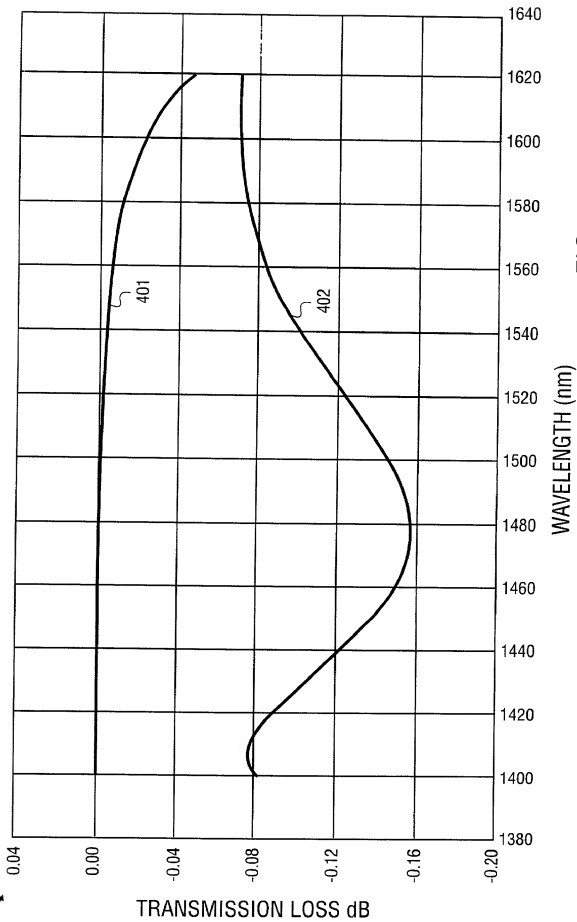


FIG. 4

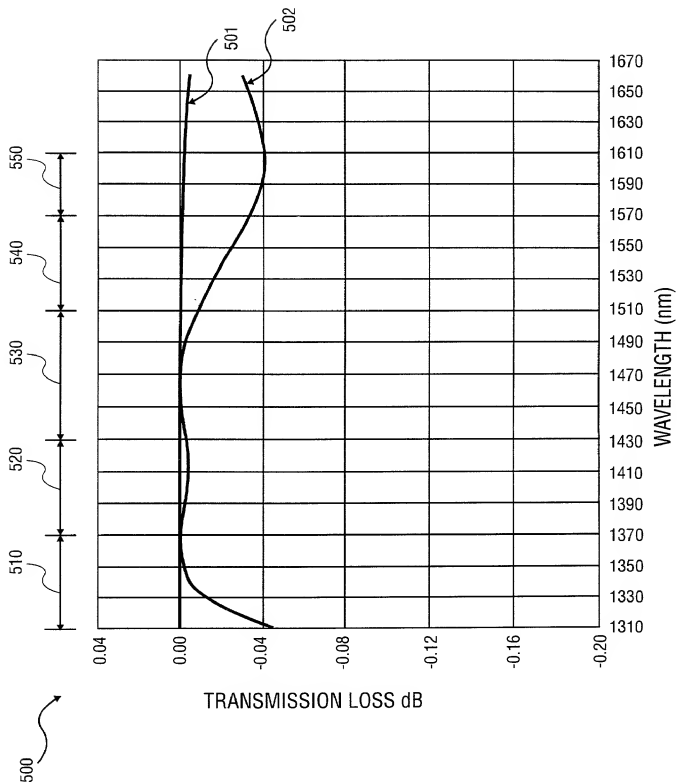


FIG. 5

ERBIUM DOPED FIBER AMPLIFIER

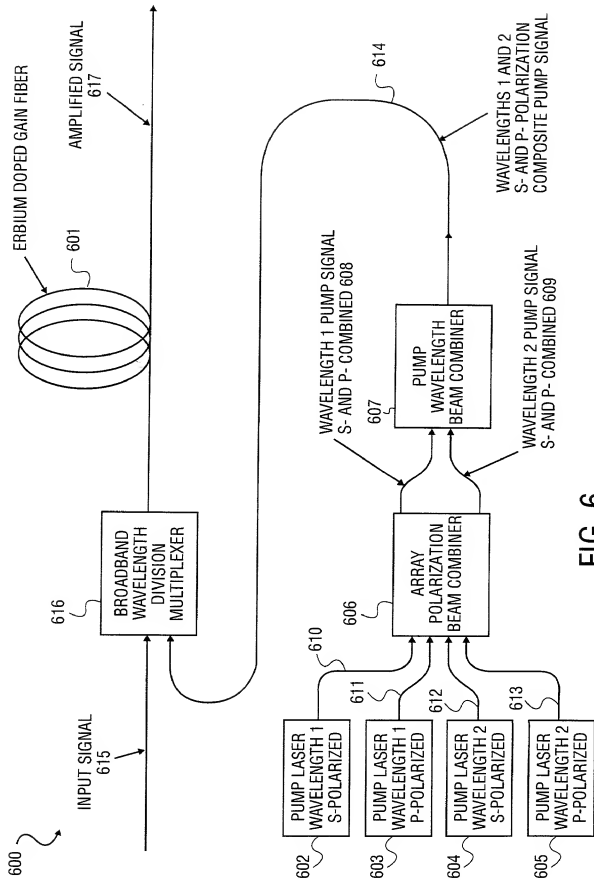


FIG. 6

RAMAN AMPLIFIER

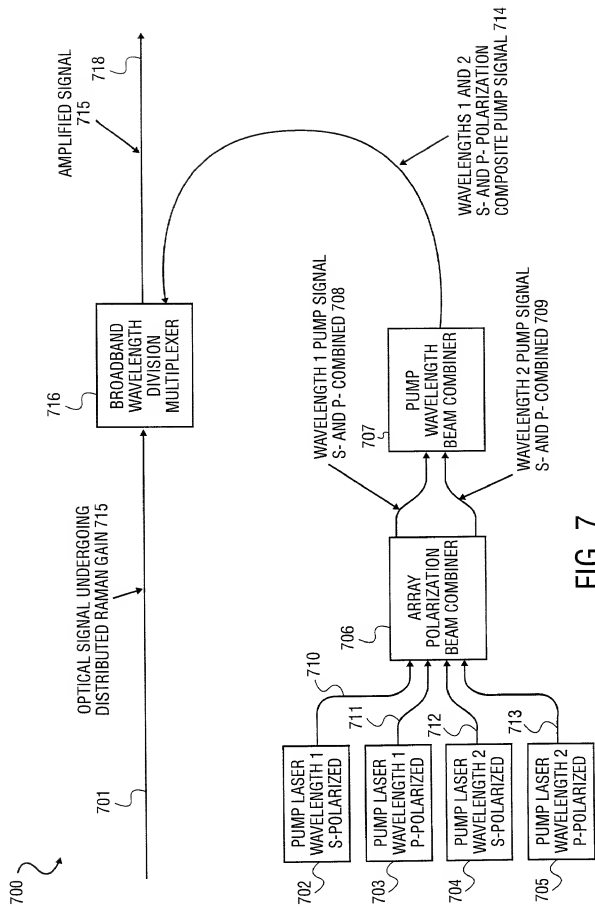


FIG. 7

ERBIUM DOPED FIBER AMPLIFIER

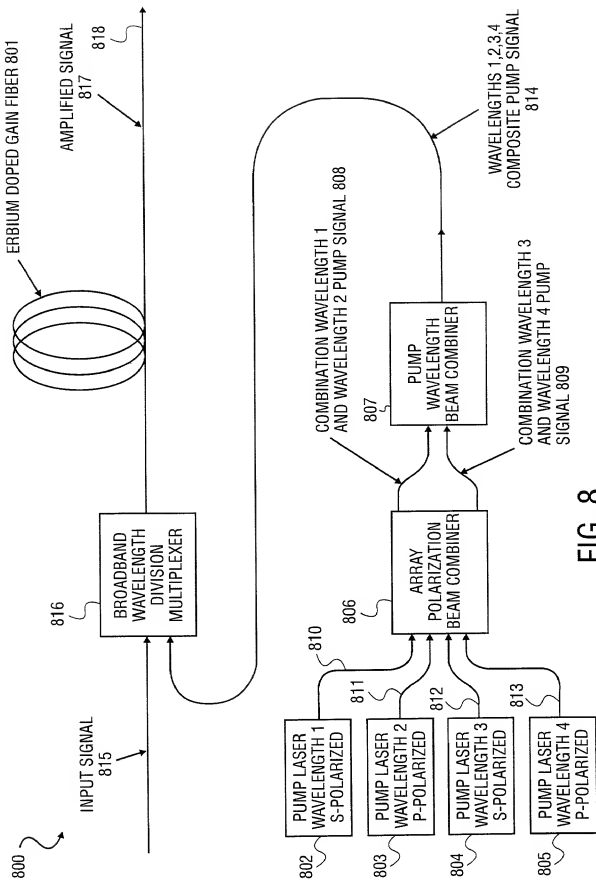


FIG. 8

RAMAN AMPLIFIER

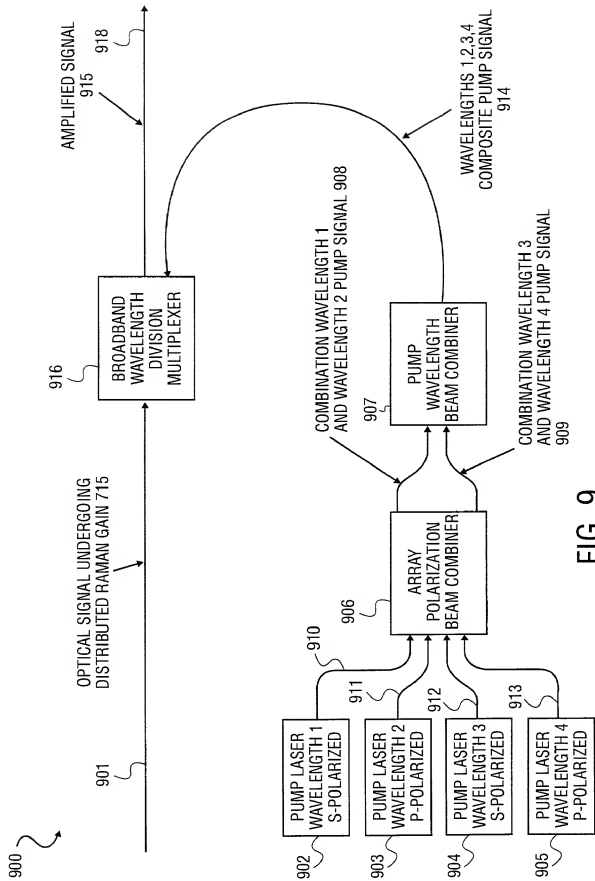


FIG. 9

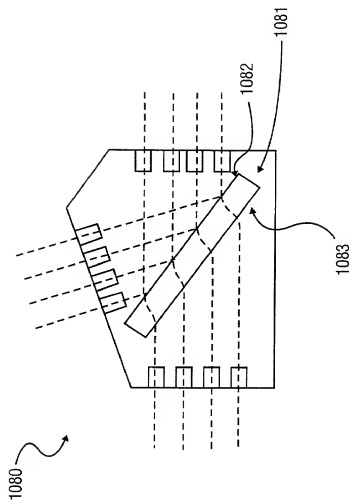


FIG. 10

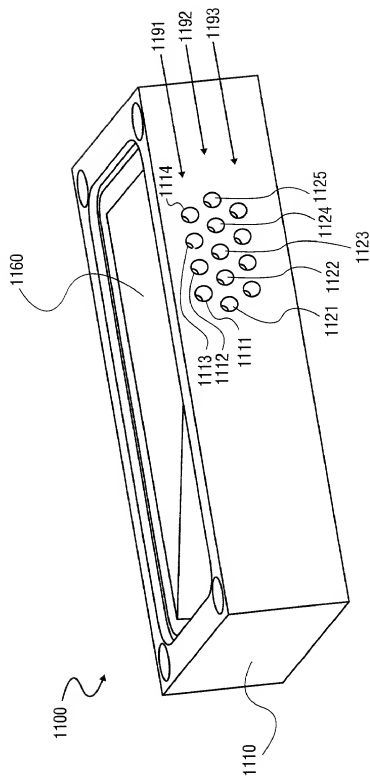


FIG. 11